tle: TRANSGENIC PLANTS HAVING A MODIFIED CARBOHYDRATE
CONTENT
ventors: Albert J.J. VAN OOYEN, et al.
pplication No.: 09/003, 047
ocket No.: 261922003302 Sheet 1 of 7 1/7 MAY 1 6 2003 TNOS LB **NPTII**  $\mathsf{Km}^\mathsf{R}$ pMOG23 PNOS EcoRI Kpnl RB Smal 'BamHI Xbal 'SacI Xhol HindIII FIG. 1

Title: TRANSGENIC PLANTS HAVING A MODIFIED CARBOHYDRATE

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CCGTCTTGAT GCTGTCAAAC ACATTAAATT TTCTTTTTG CGGGATTGGG TTAATCATGT. TGTTATTGC TTGGCTGAAC ACGGTATTAC TGCCGTCTGG ATTCCCCCGG CATATAAGGG CGGGGATGTG GTCATCAACC ACAAAGGCGG AATTTCAGGA GAACACCTAA TTAAAGCCTG GACACATTTT CATTTTCCGG GGCGCGGCAG CACATACAGO GALTITAAAT GGCATTGGTA CCATTTTGAC GGAACCGATT GGGACGAGTC GCAGTATTTT GAATGGTACA TGCCCAATGA CGGCCAACAT TGGAAGCGTT TGCAAAACGA AACGAGCCAA GCGGATGTGG GCTACGGTGC TTACGACCTT TATGATTTAG GGGAGTTTCA GAGCTGCAAT CTGCGATCAA CCGAAAGCTG AACCGCATCT ATAAGTTTCA AGGAAAGGCT TGGGATTGGG AAGTTTCCAA TGCCGACATC GATTATGACC ATCCTGATGT CAGGGAAAAA ACGGGGAAGG AAATGTTTAC GGTAGCTGAA TATTGGCAGA ATGACTTGGG GCTCATCTTC TTGCTGCTC ATTCTGCAGC AGCGGCGGCA AATCTTAATG GGACGCTGAT CGCTGATGCG ACCGAAGATG TAACCGCGGT TGAAGTCGAT CCCGCTGACC GCAACCGCGT CGCAGCAGAA ATTAAGAGAT GGGGCACTTG GTATGCCAAT GAACTGCAAT TGGACGGTTT HqaI TCTAGAGTC ATGAAACAAC AAAAACGGCT TTACGCCCGA TTGCTGACGC CAAAGTACGG CACAAAAGGA TTAACGTTTA TGAAAACGGC AACTATGATT ATTTGATGTA PstI TCAAAAAGGG ACGGTTCGGA TCCCGCGACA CTCGGCATAT AAGTCTTCAT

FIG. 24

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CTCACAAGGG AATCTGGATA CCCTCAGGTT TTCTACGGGG ATATGTACGG CACAAAATTG AACCGATCTT CGTACGGAGC ACAGCATGAT TATTTCGACC ACCATGACAT ACAAGGGAAG GCGACAGCTC GGTTGCAAAT TCAGGTTTGG CGGCATTAAT CCCGGTGGGG CAAAGCGAAT GTATGTCGGC CGGCAAAACG CCGGTGAGAC TATGATATGA GGAAATTGCT TACACAGCCG GGGCAATCGC TTGAGTCGAC TGTCCAAACA TGGTTTAAGC CGCTTGCTTA CCCCCTGGAA AACTATTTGA ACAAAACAAA TTTTAATCAT TCAGTGTTTG ACGTGCCGCT GAAATCGGTT ACATTTGTCG ATAACCATGA TGCCTTGAAA TCATTATCAG TTCCATGCTG CATCGACACA GGGAGGCGGC GACGAAAGGA GACTCCCAGC GCGAAATTCC GICGITICCA AGCAICCGIT SalI AAAAGCGAGA AAACAGTATG GAACGGTACG TGTCGGCTGG AACAGACGGA CGCTTTTATT

GCGGGGATGA AATGGCAACG TTATCTGATG TAGCAAAGAA GGACGGATTT CCTGAAGGAA ATCCGTTTTT TTATTTTGCC CGTCTTATAA ATTTCTTTGA TCATCAGCCC TCAGGAAGGA TAATTAATTT TAACAAAGTG CATAGGTAAG TTACATTTTA GTTTGAATCG BamHI

CTTGCTGACA

ATGGCATGAC ATTACCGGAA ACCGTTCGGA GCCGGTTGTC ATCAATTCGG AAGGCTGGGG

AGAGTITCAC GTAAACGGCG GGTCGGTTTC AATTTATGTT CAAAGATAGA AGAGCAGAGA

SEQ ID NO:5

AGCANATGTG TCGAAAATGA CGGTATCGCG GGTGATCA

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Inventors: Albert J.J. VAN OOYEN, et al.
Application No.: 09/003, 047
Docket No.: 261922003302 Sheet 4 of 7 4/7 SEQ ID NO:6 SEQ ID NO:7 BamHI HindIII CCCAAAAATAAAATTAAAAGAAAGTTTATGAAGGTGGTACCCATTGCCTAGGTTCGA SEQ ID NO:9 SEQ ID NO:8 NCOI Hgal SITE Q-AMYLASE ວ CGTTTAGAATTACCTGCGACTACGTCAT CATG | GCAAATCTTAATGGACGCTGATG Oligonucleotide duplex Oligonucleotide duplex Met'|mature α-Λmylase

Ţ.

NCOI

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3.

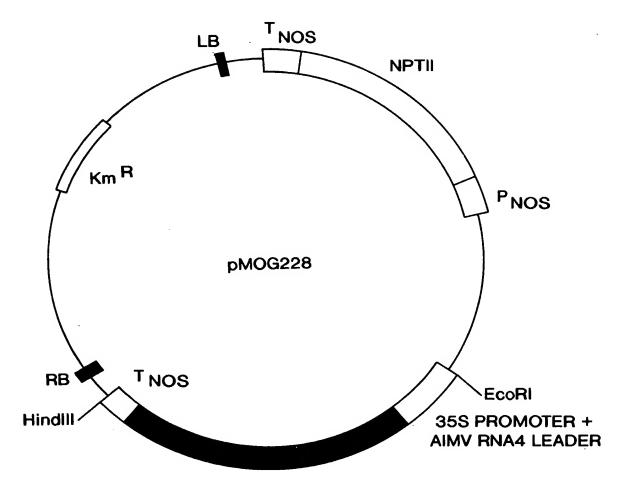
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**ALPHA-AMYLASE** 

FIG. 4

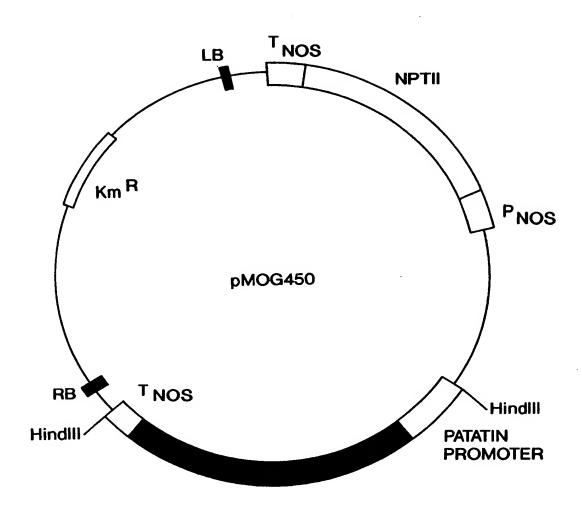
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**ALPHA-AMYLASE** 

FIG. 5

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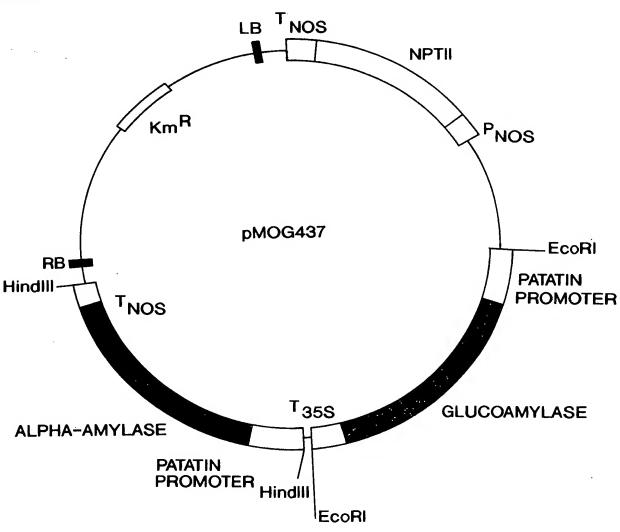


FIG. 6